Software Release Notice

System: MGS   **Release:** McMurdo 2.1
Date: 17 MAY 99

Modification Description:

McMurdo Station Upgrade

The following changes are planned for McMurdo Ground Station software. This release contains test programs to diagnosis reported problems. Modifications that have been completed since the SA team departed McMurdo are as follows:
.
1. Change frequency resolution on for uplink exciter. This fixes the Doppler display.
2. Corrected rate calculations for program track commands. (MDR99053, MDR99070, MDR99071, MDR99112, MDR99113).
3. DQM input left unchanged at end of pass (MDR99036).
4. Correct bug that changes recorder start times when pass is resaved very close to pass time.
5. Comma delimit reports file. (MDR99044).
6. Provide configuration screen correction for 8780 power out and RF out.
7. Corrected tape log view hang up. (MDR99055, MDR99057, MDR99064, MDR99066, MDR99069, MDR99101).
8. Corrected temperature scanner reading erroneous temperatures. (MDR99083)
9. Add queue status capture for debugging of queue overflow problems.
10. Decreased delay in hpib files to improve instrument response times.
11. Fixed memory leak in recorder control and improved recorders status during recorder motion activities.

Files Affected:

The files that were developed and/or utilized as part of McMurdo 2.1 are listed in Attachment 1: McMurdo 2.1 FILES.

Hardware Requirements:

N/A

Validation Procedures:

McMurdo2.1 will be validated through continued daily testing at NASA/McMurodo/10m for scheduled satellite passes. In addition, the following actions can be performed to validate some upgrades included in this release:

1. Check the loading of uplink exciter frequency and the Doppler display.
2. Program track a high elevation pass and see if antenna behaves as expected.
3. Verify the DQM switch is set correctly at the end of a pass.
4. Verify the recorder start times are correct when resaving a pass near the pass start time.
5. Verify the report logs have the commas properly placed in the files.
6. Verify the configuration screen display's the correct configuration for the 8780 power out and RF out.
7. Enter tape log screen. Close. Enter tape playback screen. Close. Enter tape log screen. Close.

Known Bugs or Limitaions:

Some open DRs may not be resolved in this release due to time constraints. For complete information and specifics see points of contact under **COMMENTS** below.

Installation Procedure:

Scientific Atlanta staff will install the new release remotely. It will be necessary to coordinate the time of the update with the operator.

Documentation Affected:

N/A

Comments:

Pam Beard will support this software installation from S-A and her number is (770) 903-2164.

<u>Approval:</u>

The software modifications described in this release notice has been validated and accepted.

_____   _____
NASA WGS Project Manager   Date

<u>SOFTWARE RELEASED:</u>

The software modifications described in this release notice have been completed and released to ground station operations.

_____   _____
System Manager   Date

_____   _____
NASA Program Monitor   Date

Attachment 1
McMurdo 2.1 Files

<u>The bin Directory:</u>

```
.StartAll
.StartUIF
AntennaControlStartup
CopyETC
Displays
Nasa
NasaStart
RestoreETC
Start
StartRemote
Stop
StopRemote
authent
chkgw
configud
control
dpsHndlr
errhandler
eup
executive
ioh
pedcont
postPassShell
que_chk
rci_client
rci_rmt
rci_server
reccon
recsch
resetLANGateway
resetLANGateway2
resetLANGateway3
resetLANGateway4
resetLANGateway5
resetLANGateway6
resetLANGateway7
resetLANGateway8
resetLANGateway9
rmqs
schedmon
snyHndlr
start.awk
start_ntp
status_l
stop.awk
stop_ntp
sup
tapelog
terminal
testexec
time_code_handler
track
```

```
uactask
winPrint
```

The etc Directory:
```
N/A
```

The etc/hpib directory:

```
lan[E2050_1.hp.com]:hpib_lan1
lan[E2050_2.hp.com]:hpib_lan2
lan[E2050_3.hp.com]:hpib_lan3
lan[E2050_4.hp.com]:hpib_lan4
lan[E2050_5.hp.com]:hpib_lan5
lan[E2050_6.hp.com]:hpib_lan6
lan[E2050_7.hp.com]:hpib_lan7
lan[E2050_8.hp.com]:hpib_lan8
lan[E2050_9.hp.com]:hpib_lan9
```

The etc/config directory:
```
N/A.
```